

REMARKS

Review and reconsideration of the non-final Office Action mailed October 31, 2008 (hereinafter "Office Action"), is respectfully requested in view of the above amendments and the following remarks. At the time of the Office Action, claims 10 and 13-20 were pending. Claims 10 and 13-20 were rejected under one or more of 35 U.S.C. § 112, second paragraph and 35 U.S.C. § 103(a). By this Amendment, claims 10 and 17 are amended. No new matter is added.

Amendments to the Claims

By this Amendment, claims 10 and 17 are amended to modify the amount of emollient present. Support for the emollient limitation can be found throughout the specification including, but not limited to, paragraph [0023]. No new matter is added.

Claims Rejections – 35 USC § 112, second paragraph

In the Office Action, claims 10-19 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action asserts that the phrase "castor oil derivative" is indefinite because it encompasses a large number of compounds that would reasonably be expected to alter the physical and chemical properties, physiological effects and functions, of the compound. While Applicants respectfully disagree with this rejection for the reasons already of record, this limitation has been eliminated from the claims in order to expedite prosecution of this application to allowance.

Applicants expressly reserve the right to pursue protection for this subject matter in this or a related application.

Claims Rejections – 35 U.S.C. § 103

In the Office Action, claims 10, 13-14, 16 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over PCT Publication WO 86/05389 to Mackles (hereinafter "Mackles WO") in view of U.S. Patent Application Publication No. 2003/0049212 issued to Robinson *et al.* (hereinafter "Robinson"), U.S. Patent Application No. 4,187,287 issued to Schreiber *et al.* (hereinafter "Schreiber"), and U.S. Patent Application Publication No. 2001/0003565 issued to Mcosker *et al.* (hereinafter "Mcosker"). The Examiner asserts that Example 1 of Mackles WO discloses a composition containing:

- (i) 35% Valfor 950,
- (ii) 0.5% Cabosil M-5 as a thickener,
- (iii) 6% decaglycerol tetraoleate as an emollient,
- (iv) 2% polyethylene glycol 400 dioleate as a nonionic surfactant, and
- (v) 51.20 % partially hydrogenated soybean oil as a triglyceride.

The Examiner asserts that the difference between Example 1 of Mackles WO and the claims are that: (i) Mackles WO does not disclose a zeolite with an Si:Al ratio in the range of 2-5:1, and (ii) that Mackles WO does not disclose the claimed thickeners. The Examiner asserts that the remaining references correct these deficiencies. For example, the Examiner asserts it would be obvious to substitute Cabosil M-5 with a castor oil derivative.

Prior to addressing the cited references, Applicants wish to review the claimed cosmetic self-warming product as set forth in amended claim 10, which recites:

10. (currently amended) A cosmetic self-warming product for skin cleansing, comprising a composition which is substantially water-free and contains:

0.1 to 40 % by weight of a hydrophilic aluminum-rich zeolite with a pore size in the range of 0.3 to 0.5 nm,
1 to 99 % by weight of a disperse oil phase, selected from the group consisting of triglycerides, silicone oils and mixtures thereof,
0.1 to 50 % by weight of a non-ionic surface-active agent,
10 to 25 0.1 to 40 % by weight of an emollient,
0.1 to 20 % by weight of a thickener, selected from the group consisting of polyethylene, 12-hydroxy stearic acid, and mixtures thereof ~~cosmetically useful castor oil derivatives and waxes,~~ and
ad 100 % by weight cosmetic carrier substances, auxiliary substances, active substances and mixtures thereof,
with the proviso that no polyvalent alcohols and polar solvents are contained in the product, wherein the product contains a zeolite with a Si/Al ratio in the range of 2-5:1.

The claimed cosmetic self-warming product includes 0.1 to 20 wt-% of a thickener selected from the group consisting of polyethylene and 12-hydroxy stearic acid; 10 to 25 wt-% emollient; and 15 to 25 % by weight of a hydrophilic aluminum-rich zeolite with a pore size in the range of 0.3 to 0.5 nm. The hydrophilic aluminum-rich zeolite has an Si/Al ratio in the range of 2:1 to 5:1. The combination of these higher concentrations of emollients and the specified amounts of hydrophilic aluminum-rich zeolites, in combination with the other claimed ingredients, produces the unexpectedly large temperature rise while simultaneously providing a soothing skin feel.

Applicants respectfully submit that the cited references do not disclose or suggest at least the claimed features of (i) a thickener selected from the group consisting of polyethylene, 12-hydroxy stearic acid and mixtures thereof, (ii) the claimed amount of emollient, (iii) the claimed amount of hydrophilic aluminum-rich zeolite, (iv) a zeolite containing composition capable of producing the claimed skin temperature increase of 4 to 8K, *i.e.*, with a Si to Al ratio ranging from 2-5:1, or (v) a combination thereof. These features are

necessary to achieve the silky feel described in the specification and the claimed skin-warming properties found in claims 17 and 20.

The Mackles WO reference is drawn to a stable, anhydrous aerosol foam that may contain a particulate solid capable of absorbing water exothermically. The anhydrous aerosol foam is prepared by combining particulate solids, *e.g.*, zeolites, with a foamable liquid oil, a foaming agent and a propellant. *See* Mackles WO, Abstract.

Mackles WO discloses Cabosil M-5 as a thickener. The Office Action asserts that Mcosker discloses that Cabosil M-5 and castor oil derivatives can be used as thickeners. However, there is nothing in the cited references that discloses or suggests the claimed thickeners, which are limited to polyethylene, 12-hydroxy stearic acid and mixtures thereof. Accordingly, Applicants respectfully request that the instant rejection be withdrawn.

In addition, Mackles WO expressly teaches that preferred zeolites have a general formula $M_{x/n}[(Al_2)_x(SiO_2)_y]$, where X and Y are integers greater than 6, the ratio of X to Y is 0.1 to 1.1, and M is a metal with a valence of n. *See* Mackles WO, page 9, ln. 18-23. As previously stated by the Examiner, this results in a Si to Al ratio of 1.1 to 0.1. In contrast, the claimed composition includes zeolites with a Si to Al ratio of 2-5:1. As Mackles WO teaches that zeolites with a Si to Al ratio of 1.1 to 0.1 are preferred, Mackles provides a strong teaching away from using the claimed zeolites with a Si to Al ratio of 2-5:1. Accordingly, there would be no motivation or suggestion to substitute the Valfor 950 disclosed in Mackles WO for any zeolite falling within the claimed Si to Al ratio range.

As set forth in the Declaration of Co-Inventor Donna Hui-Ing Hwang Under 37 C.F.R. §1.132 submitted August 12, 2008 (hereinafter "Hwang Declaration"), the claimed method (and the product of claim 20) is drawn to a composition "formulated to cause a raise in temperature of the skin by 4 to 8 K during cleansing compared to the starting surface

temperature of the skin." Mackles WO discloses zeolites with silicon-rich zeolites with an Si:Al ratio of 1.1 to 0.1, *i.e.*, 1:0.9 to 1:0.1. *See* Mackles WO, page 9, ln. 18-23. Mackles WO uses VALFOR® 950, which presumably has an Si:Al ratio between 1.1 and 0.1, as the exemplary zeolite. *See* Mackles WO, Examples 1-7 on p. 13 – 21. In order to demonstrate that the zeolite containing composition containing VALFOR 950 is not capable of producing the claimed level of heating, Applicants submitted comparative data in the Hwang Declaration.

As noted in Comparative Example #1 of the Hwang Declaration, when 100g of water are added to 45g of water-free VALFOR® 950, the temperature increase is $4.1^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$. The current disclosure described compositions using aluminum-rich zeolites, such as MOLSIV® GMP3A. *See* Specification, paragraph [0029] & [0035]. As noted in Comparative Example #2 of the Hwang Declaration, when 100g of water are added to 45g of water-free MOLSIV® GMP3A, the temperature increase is $7.2^{\circ}\text{C} \pm 0.6^{\circ}\text{C}$. As explained in the Hwang Declaration, this is a significantly different temperature increase.

However, the compositions produced based on the cited references could include up to 5 wt-% water as well as multivalent alcohols and polar solvents. Comparative Example #2 of the Hwang Declaration, demonstrates the impact of adding as little as 5 mg of water to the 45 mg samples of Comparative Example #1. The addition of 5 mg of water to the silicon-rich VALFOR® 950 resulted in a temperature increase of $1.2^{\circ}\text{C} \pm 0.31^{\circ}\text{C}$; while the same addition to the aluminum-rich MOLSIV® GMP3A resulted in a temperature increase of $1.9^{\circ}\text{C} \pm 0.33^{\circ}\text{C}$.

However, the more important information is the impact that the presence of water has on the zeolites when they are exposed to significant amounts of water, such as those used during face washing. Thus, the wetted zeolites were allowed to stand for 2 hours before they

were contacted by 100g of water. The addition of 100 mg of water to the pre-treated silicon-rich VALFOR® 950 resulted in a temperature increase of only $3.4^{\circ}\text{C} \pm 0.41^{\circ}\text{C}$; while the same addition to the pre-treated aluminum-rich MOLSIV® GMP3A resulted in a temperature increase of $6.0^{\circ}\text{C} \pm 0.34^{\circ}\text{C}$. Clearly, a composition using VALFOR 950 is not capable of "rais[ing] in temperature of the skin by 4 to 8 K during cleansing compared to the starting surface temperature of the skin." See Hwang Declaration, section 4.

Thus, Mackles WO provides a strong teaching away from using zeolites with the claimed Si to Al ratio. In addition, the Hwang Declaration establishes that, even using pure zeolite according to Mackles WO, it is simply not possible to produce the skin warming effect of the claimed cosmetic self-warming composition. Thus, even though Robinson arguably discloses the existence of zeolites having a Si to Al ratio of 2-5:1, (i) there would be no motivation to combine the references in such a way to produce the claimed cosmetic self-warming product, and (ii) the claimed skin warming effect cannot be achieved using the preferred zeolites of Mackles WO. Accordingly, Applicants respectfully request that the instant rejection be withdrawn.

In addition, the Office Action asserts that Example 1 of Mackles WO includes 6% decaglycerol tetraoleate *as an emollient*. Applicants respectfully assert that Mackles WO teaches that decaglycerol tetraoleate *is a foaming agent*. See Mackles WO, page 4, ln. 15-19; page 5, ln. 8-12; and page 6, ln. 6-15. In particular, Mackles WO discloses foaming agents that can be various polyol fatty acid esters. See Mackles WO, page 4, ln. 15-19. These polyol esters can be from one of three groups, including polyglycerol esters of fatty acids. See Mackles WO, page 5, ln. 8-12. Mackles WO then provides a list of polyglycerol esters of fatty acid that includes decaglycerol tetraoleate. See Mackle WO, page 6, ln. 6-15. Thus, it is clear that Mackles WO discloses decaglycerol tetraoleate as a foaming agent not an

emollient. In addition, Mackles WO clearly states that the preferred compositions include 4 to 6 wt-% foaming agent. *See* Mackles WO, page 7, ln. 16-18.

In contrast to Mackles WO, the claimed cosmetic self-warming product includes 10 to 25 wt-% emollient. This amount of emollient, in combination with the other claimed ingredients, is necessary to produce particularly intense warming effect and leave a special, silk-like feeling on the skin.

The importance of the intense skin warming effect contributes to pore opening so the emollients and oils used in the cosmetic agent can act more effectively. *See* Specification, paragraph [0009]. This level of warming, and resulting epidermal uptake of active ingredients, simply cannot be achieved using the Mackles WO zeolites, and Mackles WO teaches away from the substitution that would be required to produce the claimed cosmetic self-warming product.

With respect to the unexpectedly superior performance of the claimed cosmetic self-warming product, the specification explains:

The more zeolite develops its thermal effect due to the exothermal reaction with water the better is the pore opening effect and the more intense is the conditioning/cleansing effect. In addition, a certain water-repellent effect is achieved due to the combination of a high oil content in the product according to the invention with the zeolite and the absence of polyvalent alcohols, which water-repellent effect contributes to the product being extremely stable and maintaining all its desired properties when stored.

Specification, paragraph [0011].

From this description of the necessary action to produce the unexpected benefits of the claimed cosmetic self-warming product, it is clear that the cited references fail to disclose or suggest the composition of the claimed cosmetic self-warming product. In addition, the cited references do not disclose or suggest the unexpectedly superior properties of the

claimed cosmetic self-warming product, which produces a particularly intense warming effect and leaves a special, silk-like feeling on the skin.

Thus, the cited references fail to disclose at least the following features of the claimed cosmetic self-warming product: (i) a thickener selected from the group consisting of polyethylene, 12-hydroxy stearic acid and mixtures thereof, (ii) the claimed amount of emollient, (iii) the claimed amount of hydrophilic aluminum-rich zeolite, (iv) a zeolite containing composition capable of producing the claimed skin temperature increase of 4 to 8K, *i.e.*, with a Si to Al ratio ranging from 2-5:1, or (v) a combination thereof. Furthermore, the cited references teach away from using zeolites with the claimed Si to Al ratio. Accordingly, Applicants respectfully request that the instant rejection be withdrawn.

In addition, claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mackles WO in view of Robinson, Schreiber and Mcosker, further in view of U.S. Patent No. 6,274,128 issued to Bergmann *et al.*; and claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackles WO in view of Robinson, Schreiber and Mcosker, further in view of U.S. Patent No. 5,322,683 issued to Mackles *et al.* As none of these additional references overcome the deficiencies identified above, Applicants respectfully request that these rejections be withdrawn as well.

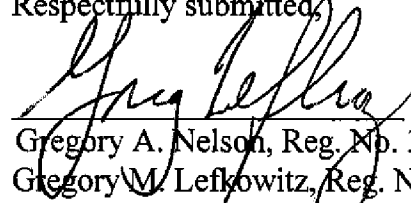
Conclusion

For at least the reasons set forth above, the independent claims are believed to be allowable. In addition, the dependent claims are believed to be allowable due to their dependence on an allowable base claim and for further features recited therein. The application is believed to be in condition for immediate allowance. If any issues remain

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outstanding, Applicant invites the Examiner to call the undersigned if it is believed that a telephone interview would expedite the prosecution of the application to an allowance.

Respectfully submitted,



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